

**Amendments to the Claims:**

Please amend the claims to read, as follows.

1. (currently amended) A processing apparatus comprising:

a process chamber made of metal for applying a process to an object to be processed placed in the process chamber by supplying a process gas to the object to be processed;

~~a bottom plate made of a metal ceramics composite and fixed to said process chamber so as to form a reduced pressure space in said process chamber;~~

a placement stage made of ceramics or a metal matrix composite located inside the process chamber so that the object to be processed is placed thereon;

a heating device incorporated into the placement stage; [[and]]

a support member made of a metal matrix composite for supporting said placement stage;

~~a seal member located between said process chamber and said bottom plate~~ the support member and a sidewall of said process chamber; and

a cooling mechanism located in a vicinity of the seal member so as to cool said seal member,

~~wherein said placement stage is directly joined to a first part of said bottom plate, which first part is smaller than said bottom plate, and said seal member is located between said process chamber and a second part of said bottom plate other than said first part~~ said support member is connected to said sidewall of said process chamber and configured and arranged to serve as a

bottom plate of said process chamber, said placement stage is directly joined to said support member.

2. (currently amended) The processing apparatus as claimed in claim 1, wherein said ~~bottom-plate~~ support member is joined to a surface of said placement stage opposite to a surface on which the object to be processed ~~[[in]]~~ is placed.

3. (currently amended) The processing apparatus as claimed in claim 1, wherein said ~~bottom-plate~~ support member has a substantially flat shape, and an entire surface of said placement stage opposite to a surface on which the object to be processed ~~[[in]]~~ is placed is joined to a flat surface of said ~~bottom~~ plate support member.

4-5. (canceled)

6. (currently amended) The processing apparatus as claimed in claim ~~[[9]]~~ 1, wherein said cooling mechanism includes a coolant passage formed in said ~~bottom-plate~~ support member.

7. (currently amended) The processing apparatus as claimed in claim ~~[[9]]~~ 1, wherein said cooling mechanism includes a coolant passage formed in a ~~wall~~ said sidewall of said process chamber.

8. (currently amended) The processing apparatus as claimed in claim 1, wherein ~~said bottom plate is joined to~~ said placement stage is joined to said support member by blazing.

9-10. (canceled)

11. (new) The processing apparatus as claimed in claim 1, wherein said support member has an opening to lead electrodes or power supply lines, which extend from said placement stage, out of said process chamber.